

HVAC Training Center

1-800-634-0154

www.alabamapower.com/hvac



2017 Winter/Spring
Schedule

January-June 2017

INSTALLATION & SERVICE COURSES

(Classes noting CEU hours are approved for State of Alabama Contractor Continuing Education and/or NATE CEUs)

1201 – Foundations for Troubleshooting Gas Furnaces: (27 State and NATE CEUs) 4 Days. Systematic implementation of dual fuel system analysis procedure. Gain working knowledge of dual fuel heat pump systems; proper venting, sizing of gas line, sequence of operation, and proper system performance.

January 17-20

March 13-16

May 22-25

1501E - Basic Refrigeration & HVAC Operations: (12 CEUs) 2 Days. Entry level; familiarization of refrigerant components, cycle of operation and problem recognition.

January 23-24

1501 - Foundations for Troubleshooting HVAC Refrigerant Systems: (27 State and NATE CEUs) 4 Days. Systematic implementation of the HVAC system analysis procedure and validation of actual sealed system performance of fully operational HVAC equipment.

January 9-12

February 6-9

March 13-16

May 15-18

1502E - Basic HVAC Electrical Operations: (12 CEUs) 2 Days. Entry level; familiarization of HVAC electrical terminology, component identification and basic equipment functions.

January 25-26

1502 - Foundations for Troubleshooting HVAC Electrical Systems: (27 State and NATE CEUs) 4 Days. Systematic implementation of HVAC system analysis procedure; and construction of an HVAC electrical system. Gain working knowledge of the basic concepts of electricity (i.e. volts, amps, capacitance, inductance, reactance, power factor, ohm's law, series/parallel circuits, etc.)

January 9-12

January 30-February 2

February 13-16

May 15-18

1503 - Troubleshooting HVAC Refrigerant Systems: (27 State and NATE CEUs) 4 Days. (Prerequisite 1501) Development of refrigerant system troubleshooting skills through proper and systematic routines in a laboratory setting closely simulating the technician's normal work environment.

January 3-6

February 13-16

March 20-23

1504 - Troubleshooting HVAC Electrical Systems: (27 State and NATE CEUs) 4 Days. (Prerequisite 1502) Development of electrical system troubleshooting skills through proper and systematic routines in a laboratory setting closely simulating the technician's normal work environment. Observe operation of live equipment; verify various failure operating modes; and identify exact cause of various system failures.

January 23-26

April 24-27

June 5-8

1505 - Servicing HVAC Refrigerant Systems: (27 State and NATE CEUs) 4 Days. Brazing, unit fabrication, evacuation and charging.

January 23-26

March 6-9

May 22-25

1506 - Servicing HVAC Electrical Systems: (27 State and NATE CEUs) 4 Days. (Prerequisites 1502 & 1504) Covers such areas as functions of solid state components used in HVAC equipment; use of meters and equipment to test and validate proper operation of components; programming of solid state thermostats to operate equipment at specific modes on specific time schedules and override capabilities for major brands of equipment.

Feb. 27-Mar.2

May 1-4

1905 - Refrigerant Recovery Certification: April 24

R410A Safety Certification: April 24

State Board Review (20 NATE CEUs): January 17-19

February 20-22

May 1-3

June 12-14

NATE Review and NATE Test (14 State CEUs): April 3-5

May 22-24

RMV- Residential Mechanical Ventilation Installation: (14 State and NATE CEUs) 2 Days. Provides invaluable information for those involved with designing and installing residential mechanical ventilation systems including HRV's and ERV's. Taught by HRAI certified instructor, this certification class covers the fundamentals of air quality assessment, system requirements and the design and installation of mechanical ventilation systems.

June 12-13

Duct & Envelope Tightness: (12 State CEUs) This two day course is designed to introduce the skills necessary to become a Duct and Envelope Tightness (DET) Verifier, certified to perform the diagnostic testing required for new homes by the 2009 IRC/IECC with Alabama amendments. Online math course must be completed prior to attending. Details given at registration.

Jan. 23-24

March 20-21

March 22-23

April 3-4

April 5-6

May 31-June 1

APPLICATION COURSES

Heat Pump Overview: (12 State CEUs) 2 Days. Familiarization of heat pump operations, efficiency ratings, dual-fuel, air-to-air and geothermal systems.

February 13-14

1800 - HVAC System Analysis: 4 days. To provide the participant with an understanding of the benefits and knowledge of methods and techniques to analyze the HVAC System for proper performance.

March 6-9

1802 - Residential Load Calculations: (27 State and NATE CEUs) 4 Days. Develop industry accepted knowledge and skills of sizing residential heating and cooling equipment through hands-on training in a classroom and laboratory setting. (Based on the Manual J approach to load calculations.)

January 23-26

February 27-March 2

April 24-27

1803 - Residential Duct Design: (27 State and NATE CEUs) 4 Days. (Prerequisite 1802) Complete tasks such as determining the design CFM for sizing a duct system and proper air volume for each conditioned zone, based on design heat gain/loss. Determine the type, size, number and placement of supply diffusers and return air grilles; select proper equipment configuration for selected applications; draw layout of locations and size trunk, branch and return duct. (ACCA Manual D method.)

February 6-9

May 22-25

1804 - Marketing Applications of Ohm's Law: (12 State CEUs) 2 Days. Assists Marketing Personnel in developing a working knowledge of Ohm's Law and power formula manipulation.

January 9-10

1807 - Duct Board Fabrication & Installation: (27 State and NATE CEUs) 4 Days. Inexperienced personnel learn to understand and apply recommended methods and techniques for fabricating duct from fibrous board material. Experienced personnel are provided the opportunity to enhance their knowledge of fibrous duct fabrication and installation methods and practices.

April 24-27

RightSuite: (14 State and NATE CEUs) 2 Days. Designed to enhance the participant's skills to use computer software applications to calculate residential loads, design ducts, and to introduce the other program modules.

April 10-11

*****You will receive a 20% discount on the Wrightsoft Software if you attend the RightSuite Class*****

International Ground Source Heat Pump Assn. (IGSHPA) Closed Loop Certification:

(19 State CEUs:) 4 Days. Provides the HVAC contractor with skills necessary to properly install and evaluate residential geothermal systems. Certification exam given at the conclusion of course. A must for quality geothermal installations. One year membership in IGSHPA included in price.

April 24-27

To register: www.alabamapower.com/hvac or call 1-800-634-0154

Alabama Power Company HVAC Training Center
Approved Curriculum
To Sit For State of Alabama HVAC Contractor's Exam

- 1501 - Foundations for Troubleshooting HVAC Refrigerant Systems:** 27 hours
4 Days. Systematic implementation of the HVAC system analysis procedure and validation of actual sealed system performance of fully operational HVAC equipment.
- 1502 - Foundations for Troubleshooting HVAC Electrical Systems:** 27 hours
4 Days. Systematic implementation of HVAC system analysis procedure; and construction of an HVAC electrical system. Gain working knowledge of the basic concepts of electricity (i.e. volts, amps, capacitance, inductance, reactance, power factor, ohm's law, series/parallel circuits, etc.)
- 1503 - Troubleshooting HVAC Refrigerant Systems:** 27 hours
4 Days. (Prerequisite 1501) Development of refrigerant system troubleshooting skills through proper and systematic routines in a laboratory setting closely simulating the technician's normal work environment.
- 1504 - Troubleshooting HVAC Electrical Systems:** 27 hours
4 Days. (Prerequisite 1502) Development of electrical system troubleshooting skills through proper and systematic routines in a laboratory setting closely simulating the technician's normal work environment. Observe operation of live equipment; verify various failure operating modes; and identify exact cause of various system failures.
- 1505 - Servicing HVAC Refrigerant Systems:** 27 hours
4 Days. Brazing, unit fabrication, evacuation and charging.
- 1506 - Servicing HVAC Electrical Systems:** 27 hours
4 Days. (Prerequisites 1502 & 1504) Covers such areas as functions of solid state components used in HVAC equipment; use of meters and equipment to test and validate proper operation of components; programming of solid state thermostats to operate equipment at specific modes on specific time schedules and override capabilities for major brands of equipment.
- 1201 – Foundations for Troubleshooting Gas Furnaces:** 27 Hours
4 Days. Systematic implementation of dual fuel system analysis procedure. Gain working knowledge of dual fuel heat pump systems; proper venting, sizing of gas line, sequence of operation, and proper system performance.
- 1802 - Residential Load Calculations:** 27 Hours
4 Days. Develop industry accepted knowledge and skills of sizing residential heating and cooling equipment through hands-on training in a classroom and laboratory setting. (Based on the Manual J approach to load calculations.)
- 1803 - Residential Duct Design:** 27 Hours
4 Days. (Prerequisite 1802) Complete tasks such as determining the design CFM for sizing a duct system and proper air volume for each conditioned zone, based on design heat gain/loss. Determine the type, size, number and placement of supply diffusers and return air grilles; select proper equipment configuration for selected applications; draw layout of locations and size trunk, branch and return duct. (ACCA Manual D method.)
- 1807 - Duct Board Fabrication & Installation:** 27 Hours
4 Days. Inexperienced personnel learn to understand and apply recommended methods and techniques for fabricating duct from fibrous board material. Experienced personnel are provided the opportunity to enhance their knowledge of fibrous duct fabrication and installation methods and practices.

Total Hours Required - 270

Total Price = \$12,000.00

HVAC TRAINING CENTER

PRICE LIST

All prices below include registration, all class materials (except State Board Review) and lunches.
(Hotel not included)

1201	\$ 1,200	1703	\$600
1501E	\$ 600	1704	\$600
1501	\$ 1,200	1807	\$1,200
1502E	\$ 600	DET Training	\$600
1502	\$ 1,200	*DET Certification	\$125
1503	\$ 1,200	State Board Review	\$925
1504	\$ 1,200	RightSuite	\$600
1505	\$ 1,200	NATE Exam	varies
1506	\$ 1,200	NATE Review	\$600
1802	\$ 1,200	R410A Safety Cert.	\$350
1803	\$ 1,200	IGSHPA CERT	\$1,585
1804	\$ 600	Heat Pump Overview	\$600
1701	\$ 600	RMV	\$225
1702	\$ 600	Ref. Rec. Cert (1905)	\$350

*** Participant is responsible for payment of DET Certification to Alabama Home Builders Association.**

Please note that we **do not** accept personal checks. Acceptable forms of payment are company checks, cashier checks, money order and credit cards



Hotel Accommodations available at the
The Holiday Inn Express, I-65 Exit 205 Clanton
205-280-1880

Rate \$85.50 + tax if you mention you are attending training at Alabama Power.

ALABAMA POWER HVAC TRAINING CENTER
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Verbena, AL 36091
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**REVIEW FOR STATE OF ALABAMA HEATING &
AIR CONDITIONING CONTRACTOR'S CERTIFICATION TEST**

This training is a review of the books and materials required for the State of Alabama Contractor's Certification Test. **Books are not included in the price of the class** and must be purchased prior to attending. Books are available for purchase at the Training Center. See list below.

Dates for Review Class:

January 17-19

February 20-22

May 1-3

June 12-14

Circle desired date

Cost of Review Class - \$925

REFERENCES FOR HEATING AND AIR CONDITIONING

Book	Price
<u>International Fuel Code, 2009</u>	70.00
<u>International Mechanical Code, 2009</u>	70.00
<u>International Residential Code for 1 and 2 Family Dwellings, 2009</u>	100.00
<u>International Energy Conservation Code, 2009</u>	40.00
<u>Refrigeration & Air Conditioning Technology, 7th Edition</u>	165.00
<u>Manual J-Residential Load Calculations (8th Edition - Abridged)</u>	75.00
<u>Manual D—Residential Duct Systems (2009)</u>	85.00
<u>ACCA Ductulator</u>	50.00
<u>Code of Federal Regulations, Title 29, Part 1926, 2002</u>	50.00
<u>HVAC Laws & Regulations</u>	www.hacr.alabama.gov/Law.aspx

(Books should be most recent versions on State list)

BOOK PRICES ARE SUBJECT TO CHANGE

Subtotal _____
Tax (9%) _____
Shipping & Handling 19.00

(Total for all books with tax & shipping = \$787.00
(All books + class = \$1,712.00)

Cost of Review Class 925.00
(If applicable)

Total _____

Registration Form

Name _____ Company _____
Address _____ City/State _____
Zip _____ Phone _____ Fax _____
Email address _____

Method of Payment: Check or Money Order – *Payable to Alabama Power Company*
MC VISA AMEX DISCOVER

To make a credit card payment, please call Kamber at 1-800-634-0154.

Mail to address at top of page or fax to 205-755-6168.

Back by popular demand!

Maintenance and Service Training

This program is composed of four 2-day modules that are designed to equip the maintenance technician with skills to perform preventive maintenance service; and to implement techniques to complete simple appliance and general electrical service and repair. You will gain knowledge through a classroom environment and laboratory activities.

1701

Module I—Applications & Foundations

This module includes terminology; an introduction to blueprint reading; safety; fundamentals of electricity; introduction to electrical circuits; and the proper use of meters and test equipment.

February 20-21

1702

Module II—Indoor Wiring

This module includes an overview of indoor appliance and lighting circuits; basic electrical components; troubleshooting symptoms; and maintenance and minor repair procedures.

February 22-23

1703

Module III—Appliances

Includes an explanation of appliance operation and basic repair procedures including repair of ranges, refrigerators and water heaters.

March 13-14

1704

Module IV—Heating & Air Conditioning Equipment

Discusses the preventive maintenance procedures to maintain proper equipment performance. Techniques are established to check the operation and performance of the electrical, refrigerant, and air distribution systems; and to complete minor repair and general maintenance procedures.

March 15-16

Cost is \$600 per class



Alabama Power

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Verbena, AL 36091

**PRESORTED
Standard
U.S. POSTAGE
PAID
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Birmingham, AL**

Visit our website at
www.alabamapower.com/hvac



DIRECTIONS TO TRAINING CENTER

Follow I-65 to Clanton Exit #205. Follow 31 South approximately 4 miles to Highway 22. Turn left on 22. Go approximately 4 miles and watch for small Mitchell Dam sign on right side of road. Turn left at sign (County Road #93). Training Center is approximately 2.5 miles.

Physical address: 2388 County Road 93, Verbena, AL 36091.